

| L Number | Hits | Search Text | DB | Time stamp |
|----------|--------|--|--------------------|------------------|
| 1 | 1 | ("6305426").PN. | USPAT; US-PGPUB | 2004/05/26 10:52 |
| 2 | 1775 | ((138/120) or (138/155) or (138/113) or (138/114)).CCLS. | USPAT; US-PGPUB | 2004/05/26 10:53 |
| 3 | 1448 | ((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS. | USPAT; US-PGPUB | 2004/05/26 10:53 |
| 4 | 3190 | ((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) | USPAT; US-PGPUB | 2004/05/26 10:55 |
| 5 | 9 | ("2521127" "3684320" "4097074" "4116478" "4296953" "5002318" "5613714" "5897146" "6056329").PN. | USPAT | 2004/05/26 10:53 |
| 6 | 289935 | sleeve | USPAT; US-PGPUB | 2004/05/26 10:55 |
| 7 | 15293 | pipe with joint | USPAT; US-PGPUB | 2004/05/26 10:55 |
| 8 | 1491 | (pipe with joint) same flexible | USPAT; US-PGPUB | 2004/05/26 10:55 |
| 9 | 459 | sleeve and ((pipe with joint) same flexible) | USPAT; US-PGPUB | 2004/05/26 10:55 |
| 10 | 407428 | pe or polyethylene | USPAT; US-PGPUB | 2004/05/26 10:55 |
| 11 | 77 | (sleeve and ((pipe with joint) same flexible)) and (pe or polyethylene) | USPAT; US-PGPUB | 2004/05/26 10:58 |
| 12 | 382 | (sleeve and ((pipe with joint) same flexible)) not ((sleeve and ((pipe with joint) same flexible)) and (pe or polyethylene)) | USPAT; US-PGPUB | 2004/05/26 11:07 |
| 13 | 3172 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) | USPAT; US-PGPUB | 2004/05/26 11:08 |
| 24 | 8 | ("2249848" "3002775" "4351351" "4923319" "5161828" "5474408" "6056329" "6056471").PN. | USPAT | 2004/05/26 11:08 |
| 25 | 512 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve | USPAT; US-PGPUB | 2004/05/26 11:09 |
| 26 | 282 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint) | USPAT; US-PGPUB | 2004/05/26 11:09 |
| 27 | 245 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene) | USPAT; US-PGPUB | 2004/05/26 11:09 |
| 28 | 83 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve) and ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)) | USPAT; US-PGPUB | 2004/05/26 11:10 |
| 29 | 11200 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) an ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve) and ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene))) | USPAT; US-PGPUB | 2004/05/26 11:10 |

| | | | | |
|----|-----|--|--------------------|------------------|
| 30 | 27 | ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) and ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and sleeve) and ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene))) | USPAT; US-PGPUB | 2004/05/26 11:11 |
| 31 | 56 | ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and sleeve) and ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene))) not ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) and ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and sleeve) and ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene))) | USPAT; US-PGPUB | 2004/05/26 11:16 |
| 32 | 26 | ("0203094" "0428023" "1001842" "1255577" "1276117" "1451800" "1500921" "3329967" "3584822" "3669362" "3869151" "3910277" "4282612" "4396797" "4545081" "4850616" "4865362" "4964573" "5032015" "5184777" "5449206" "5517392" "5778939" "5865378" "RE36883" "6164570").PN. | USPAT | 2004/05/26 11:12 |
| 33 | 162 | ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)) not ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and sleeve) and ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene))) | USPAT; US-PGPUB | 2004/05/26 11:16 |
| 34 | 228 | ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) not ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene))) | USPAT; US-PGPUB | 2004/05/26 11:25 |
| 35 | 8 | ("2848255" "3637239" "3712648" "3938833" "4296953" "4776617" "5192094" "5570910").PN. | USPAT | 2004/05/26 11:20 |
| 36 | 11 | ("3910277" "4703135" "4919458" "5069486" "5129681" "5134251" "5143123" "5215338" "5248170" "5353843" "5449206").PN. | USPAT | 2004/05/26 11:21 |

| | | | | |
|----|------|---|--------------------|------------------|
| 37 | 473 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene))) | USPAT; US-PGPUB | 2004/05/26 11:25 |
| 38 | 358 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve) not ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene))) | USPAT; US-PGPUB | 2004/05/26 11:25 |
| 39 | 8 | "3131642" "3142498" "3190374" "3203662" "3416819" "3822412" "4293150" "4350372".PN. | USPAT | 2004/05/26 11:28 |
| 40 | 831 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene))) | USPAT; US-PGPUB | 2004/05/26 11:31 |
| 41 | 2359 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene))) | USPAT; US-PGPUB | 2004/05/26 12:51 |
| 42 | 46 | (((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)))) and spherical | USPAT; US-PGPUB | 2004/05/26 12:55 |

| | | | | |
|----|------|--|--------------------|------------------|
| 43 | 2313 | <p> ((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or ((((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)))))) not (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not ((((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or ((((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)))))) and spherical) </p> | USPAT; US-PGPUB | 2004/05/26 12:55 |
| 44 | 8 | <p> ((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or ((((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)))))) not (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not ((((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or ((((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)))))) and spherical)) and spher\$ </p> | USPAT; US-PGPUB | 2004/05/26 12:56 |

| | | | | |
|----|------|---|--------------------|------------------|
| 45 | 2305 | <p> ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)))))) not ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)))))) and spherical)) not (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)))))) not ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and sleeve) or ((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pipe with joint)) or (((((((138/120) or (138/155) or (138/113) or (138/114)).CCLS.) or (((285/31) or (285/145.3) or (285/145.4) or (285/402) or (285/302) or (285/123.12)).CCLS.)) not (sleeve and ((pipe with joint) same flexible))) and (pe or polyethylene)))))) and spherical)) and spher\$) </p> | USPAT; US-PGPUB | 2004/05/26 12:56 |
|----|------|---|--------------------|------------------|